Material Safety Data Sheet

Revision date: 21/01/2015 **Supersedes date:** 15/07/2014

Transporta

This Material Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

technicoll® 9110

1.2. Relevant identified use s of the substance or mixture and uses advised against

Identified uses

Adhesive

1.3. Details of the supplier of the substance or mixture

Address: RUDERER KLEBETECHNIK GMBH, Harthauser Str. 2, D-85604 Zorneding

Telephone: +49 (0)8106/2421-0 **E Mail:** info@technicoll.de

1.4. Emergency telephone number

Giftinformationszentrum (GIZ) Nord: +49 (0) 551/19240

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture CLP REGULATION (EC) No 1272/2008

CLASSIFICATION:

Flammable Liquid, Category 2 - Flam. Liq. 2; H225 Skin Corrosion/Irritation, Category 2 - Skin Irrit. 2; H315

Specific Target Organ Toxicity-Single Exposure, Category 3 - STOT SE 3; H336

Hazardous to the Aquatic Environment (Acute), Category 1 - Aquatic Acute 1; H400

Hazardous to the Aquatic Environment (Chronic), Category 1 - Aquatic Chronic 1; H410

For full text of H phrases, see Section 16.

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

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Indication of danger

Highly flammable; F; R11

Irritant; Xi; R38

R67

Dangerous for the environment; N; R50/53

For full text of R phrases, see Section 16.

2.2. Label elements

CLP REGULATION (EC) No 1272/2008

SIGNAL WORD

DANGER

Symbols:

GHS02 (Flame) |GHS07 (Exclamation mark) |GHS09 (Environment) |

Pictograms







Ingredient CAS Nbr % by Wt Cyclohexane 110-82-7 60 - 80

HAZARD STATEMENTS:

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H410 Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

Prevention:

P210A Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

Response:

P370 + P378G In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or

carbon dioxide to extinguish.

Disposal:

P501 Dispose of contents/container in accordance with applicable local/regional/national/international

regulations.

8% of the mixture consists of components of unknown acute oral toxicity.

Notes on labelling

H304 is not required on the label due to the product's viscosity

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

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Symbol(s)







Highly Flammable

Irritan

Dangerous for the environment

Contains:

No ingredients are assigned to the label.

Risk phrases

R11 Highly flammable. R38 Irritating to skin.

R67 Vapours may cause drowsiness and dizziness.

R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Safety phrases

S16 Keep away from sources of ignition - No Smoking.

S23C Do not breathe vapour or spray. S51 Use only in well ventilated areas.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

Notes on labelling

R65 is not required on the label due to the product's viscosity.

2.3. Other hazards

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Cyclohexane	110-82-7	EINECS 203-	60 - 80	F:R11; Xn:R65; Xi:R38;
		806-2		N:R50/53; R67 - Nota 4 (EU)
				Flam. Liq. 2, H225; Asp. Tox. 1, H304; Skin Irrit. 2, H315; STOT SE 3, H336; Aquatic Acute 1, H400,M=1; Aquatic Chronic 1, H410,M=1 (CLP)
Styrene-butadiene polymer	9003-55-8		7 - 13	
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	31393-98-3		5 - 10	
Dipentene Polymer	9003-73-0		5 - 10	R53 (Self Classified)
				Aquatic Chronic 4, H413 (Self Classified)

Please see section 16 for the full text of any R phrases and H statements referred to in this section Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this MSDS

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation

Remove person to fresh air. If you feel unwell, get medical attention.

Skin contact

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

Eve contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

Hazardous Decomposition or By-Products

SubstanceConditionAldehydes.During combustion.Carbon monoxide.During combustion.Carbon dioxide.During combustion.

5.3. Advice for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate area. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapours, in accordance with good industrial hygiene practice. Warning: A motor could be an ignition source and could cause flammable gases or vapours in the spill area to burn or explode. Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

6.2. Environmental precautions

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Avoid release to the environment. For larger spills, cover drains and build dykes to prevent entry into sewer systems or bodies of water

6.3. Methods and material for containment and cleaning up

Contain spill. Cover spill area with a fire-extinguishing foam. An appropriate aqueous film forming foam (AFFF) is recommended. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorised person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and Safety Data Sheet. Seal the container. Dispose of collected material as soon as possible.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

SECTION 7: Handling and storage

7.1. Precautions for safe handling

For industrial or professional use only. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidising agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store away from heat. Store away from acids. Store away from oxidising agents.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient CAS Nbr Agency Limit type Additional comments

Cyclohexane 110-82-7 UK HSC TWA:350 mg/m³(100

ppm);STEL:1050 mg/m³(300

ppm)

UK HSC: UK Health and Safety Commission

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

Biological limit values

No biological limit values exist for any of the components listed in Section 3 of this safety data sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapours/spray. If ventilation is not adequate, use respiratory protection equipment. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

None required.

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended:

MaterialThickness (mm)Breakthrough TimeNitrile rubber.No data availableNo data available

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Full facepiece air-purifying respirator suitable for organic vapours

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Liquid.

Appearance/Odour Light amber coloured, solvent odour.

Odour threshold No data available. pH Not applicable.

Boiling point/boiling range >=81 °C [Details:Cyclohexane]

Melting pointNot applicable.Flammability (solid, gas)Not applicable.Explosive propertiesNot classifiedOxidising propertiesNot classified

Flash point -20 °C [Test Method: Closed Cup]

Autoignition temperature245 °CFlammable Limits(LEL)1.1 % volumeFlammable Limits(UEL)8 % volume

Vapour pressure<=12,665.6 Pa [@ 20 °C]</th>Relative density0.82 [Ref Std:WATER=1]Water solubilitySlight (less than 10%)Solubility- non-waterNo data available.Partition coefficient: n-octanol/waterNo data available.

Evaporation rate>=2.0 [Ref Std:WATER=1]Vapour density0.8 [Ref Std:AIR=1]Decomposition temperatureNo data available.Viscosity0.15 - 0.3 Pa-s [@, 23 °C]

Density 0.82 g/ml

9.2. Other information

VOC less H2O & exempt solvents <=597 g/l [*Test Method*:calculated SCAQMD rule 443.1]

Solids content 20 - 40 %

SECTION 10: Stability and reactivity

10.1 Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section

10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

Heat

Sparks and/or flames.

10.5 Incompatible materials

Reducing agents.

Strong oxidising agents.

10.6 Hazardous decomposition products

Substance

None known.

Condition

Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

May be harmful if inhaled. Respiratory tract irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below).

Skin contact

May be harmful in contact with skin.

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye contact

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion

Gastrointestinal irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhoea.

Additional Health Effects:

Single exposure may cause target organ effects:

Central nervous system (CNS) depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE2,000 - 5,000 mg/kg
Overall product	Inhalation- Vapor(4 hr)		No data available; calculated ATE20 - 50 mg/l
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Cyclohexane	Dermal	Rat	LD50 > 2,000 mg/kg
Cyclohexane	Inhalation- Vapor (4 hours)	Rat	LC50 > 32.9 mg/l
Cyclohexane	Ingestion	Rat	LD50 6,200 mg/kg
Styrene-butadiene polymer	Dermal	Rabbit	LD50 > 2,000 mg/kg
Styrene-butadiene polymer	Ingestion	Rat	LD50 > 5,000 mg/kg
2,6,6-Trimethylbicyclo[3.1.1]hept-2-ene, polymer with 6,6-dimethyl-2-methylenebicyclo[3.1.1]heptane	Ingestion	Rat	LD50 > 34,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Cyclohexane	Rabbit	Mild irritant
Styrene-butadiene polymer		No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Cyclohexane	Rabbit	Mild irritant

Skin Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Respiratory Sensitisation

For the component/components, either no data is currently available or the data is not sufficient for classification.

Germ Cell Mutagenicity

Germ Cen Mutagementy		
Name	Route	Value
Cyclohexane	In Vitro	Not mutagenic
Cyclohexane	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

For the component/components, either no data is currently available or the data is not sufficient for classification.

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Cyclohexane	Inhalation	Not toxic to female reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Not toxic to male reproduction	Rat	NOAEL 24 mg/l	2 generation
Cyclohexane	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 6.9 mg/l	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Cyclohexane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Cyclohexane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Human and animal	NOAEL Not available	

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration	
Cyclohexane	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 24 mg/l	90 days	
Cyclohexane	Inhalation	auditory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.7 mg/l	90 days	
Cyclohexane	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rabbit	NOAEL 2.7 mg/l	10 weeks	
Cyclohexane	Inhalation	hematopoietic system	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 24 mg/l	14 weeks	
Cyclohexane	Inhalation	peripheral nervous system	All data are negative	Rat	NOAEL 8.6 mg/l	30 weeks	

Aspiration Hazard

Name	Value
Cyclohexane	Aspiration hazard

SECTION 12: Ecological information

The information below may not agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 12 are based on UN GHS calculation rules.

12.1. Toxicity

No product test data available.

Material CAS Nbr Organism Type Exposure Test endpoint Test result	
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2,6,6- Trimethylbicyc lo[3.1.1]hept- 2-ene, polymer with 6,6- dimethyl-2- methylenebicy clo[3.1.1]hepta ne	31393-98-3		Data not available or insufficient for classification			
Cyclohexane	110-82-7	Green Algae	Experimental	72 hours	EC50	3.4 mg/l
Cyclohexane	110-82-7	Fathead minnow	Experimental	96 hours	LC50	4.53 mg/l
Cyclohexane	110-82-7	Water flea	Experimental	48 hours	EC50	0.9 mg/l
Dipentene Polymer	9003-73-0		Data not available or insufficient for classification			
Styrene- butadiene polymer	9003-55-8		Data not available or insufficient for classification			

12.2. Persistence and degradability

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
Cyclohexane	110-82-7	Experimental		Photolytic half-	4.14 days (t	Other methods
		Photolysis		life (in air)	1/2)	
Styrene-	9003-55-8	Data not	N/A	N/A	N/A	N/A
butadiene		available or				
polymer		insufficient for				
		classification				
Dipentene	9003-73-0	Laboratory	28 days	BOD	0 % weight	OECD 301C - MITI
Polymer		Biodegradation				test (I)
2,6,6-	31393-98-3	Experimental	28 days	BOD	0 % weight	OECD 301C - MITI
Trimethylbicyc		Biodegradation				test (I)
lo[3.1.1]hept-						
2-ene, polymer						
with 6,6-						
dimethyl-2-						
methylenebicy						
clo[3.1.1]hepta						
ne						
Cyclohexane	110-82-7	Experimental	28 days	BOD	77 % weight	OECD 301F -
		Biodegradation				Manometric
						respirometry

12.3 : Bioaccumulative potential

Material	CAS Nbr	Test type	Duration	Study Type	Test result	Protocol
2,6,6-	31393-98-3	Data not	N/A	N/A	N/A	N/A
Trimethylbicyc		available or				
lo[3.1.1]hept-		insufficient for				
2-ene, polymer		classification				
with 6,6-						
dimethyl-2-						

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methylenebicy clo[3.1.1]hepta ne						
Styrene- butadiene polymer	9003-55-8	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Dipentene Polymer	9003-73-0	Laboratory BCF - Other	70 days	Bioaccumulati on factor	11100	OECD 305E - Bioaccumulation flow- through fish test
Cyclohexane	110-82-7	Experimental BCF-Carp	56 days	Bioaccumulati on factor	<129	Other methods

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

Ingredient	CAS Nbr	PBT/vPvB status
Dipentene Polymer	9003-73-0	Meets REACH PBT criteria
2,6,6-Trimethylbicyclo[3.1.1]hept-	31393-98-3	Meets REACH PBT criteria
2-ene, polymer with 6,6-dimethyl-2-		
methylenebicyclo[3.1.1]heptane		

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

See Section 11.1 Information on toxicological effects

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of our control, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 09* Waste adhesives and sealants containing organic solvents or other dangerous substances 20 01 27* Paint, inks, adhesives and resins containing dangerous substances

SECTION 14: Transportation information

ADR/RID: UN1133, ADHESIVES, LIMITED QUANTITY, 3., II, (E), ADR Classification Code: F1. IMDG-CODE: UN1133, ADHESIVES, (CYCLOHEXANE), 3, II, IMDG-Code segregation code: NONE, LIMITED

QUANTITY, Marine Pollutant, (CYCLOHEXANE), EMS: FE,SD.

ICAO/IATA: UN1133, ADHESIVES, 3., II.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Carcinogenicity

IngredientCAS NbrClassificationRegulationStyrene-butadiene polymer9003-55-8Gr. 3: Not classifiableInternational Agency
for Research on Cancer

Global inventory status

Contact us for more information. The components of this material are in compliance with the China "Measures on Environmental Management of New Chemical Substance". Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of the Korean Toxic Chemical Control Law. Certain restrictions may apply. Contact the selling division for additional information. The components of this material are in compliance with the provisions of Australia National Industrial Chemical Notification and Assessment Scheme (NICNAS). Certain restrictions may apply. Contact the selling division for additional information. The components of this product are in compliance with the new substance notification requirements of CEPA. The components of this product are in compliance with the chemical notification requirements of TSCA.

15.2. Chemical Safety Assessment

Not applicable

H225

SECTION 16: Other information

List of relevant H statements

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Highly flammable liquid and vapour.

List of relevant R-phrases

R11 Highly flammable. R38 Irritating to skin.

R50/53 Very toxic to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

R53 May cause long-term adverse effects in the aquatic environment.

R65 Harmful: May cause lung damage if swallowed. R67 Vapours may cause drowsiness and dizziness.

Revision information:

Revision Changes:

Section 1: Product use information information was modified.

Section 1: Product identification numbers information was modified.

Section 15: Carcinogenicity information information was modified.

Section 16: List of relevant R phrase information information was modified.

Section 3: Composition/Information of ingredients table information was modified.

Section 12: Component ecotoxicity information information was modified.

Section 12: Persistence and Degradability information information was modified.

Section 12:Bioccumulative potential information information was modified.

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Copyright information was modified.
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Section 9: Property description for optional properties information was modified.

CLP: Ingredient table information was modified.

Section 8: Occupational exposure limit table information was modified.

OEL Reg Agency Desc information was modified.

Section 11: Acute Toxicity table information was modified.

Section 11: Serious Eye Damage/Irritation Table information was modified.

Section 11: Germ Cell Mutagenicity Table information was modified.

Section 11: Additional Health Effects heading information was modified.

Section 11: Reproductive Toxicity Table information was modified.

Section 11: Skin Corrosion/Irritation Table information was modified.

Section 11: Target Organs - Repeated Table information was modified.

Section 11: Target Organs - Single Table information was modified.

Section 11: Health Effects - Skin information information was modified.

Section 11: Health Effects - Inhalation information information was modified.

Section 11: Health Effects - Ingestion information information was modified.

Section 7: Precautions safe handling information information was modified.

Section 10.1: Reactivity information information was modified.

Two-column table displaying the unique list of H Codes and statements (std phrases) for all components of the given material, information was modified.

Section 11: Single exposure may cause target organ effects heading information was modified.

Section 9: All Properties information was modified.

Section 8: Eye protection information information was added.

Section 8: Occupational exposure limit table information was added.

Section 11: Aspiration Hazard table - Name heading information was added.

Section 11: Aspiration Hazard table - Value heading information was added.

Section 11: Respiratory Sensitization text information was added.

Section 11: Skin Sensitization text information was added.

Section 11: Serious Eye Damage/Irritation table - Name heading information was added.

Section 11: Serious Eye Damage/Irritation table - Species heading information was added.

Section 11: Serious Eye Damage/Irritation table - Value heading information was added.

Section 11: Skin Corrosion/Irritation table - Name heading information was added.

Section 11: Skin Corrosion/Irritation table - Species heading information was added.

Section 11: Skin Corrosion/Irritation table - Value heading information was added.

Section 11: Germ Cell Mutagenicity table - Name heading information was added. Section 11: Germ Cell Mutagenicity table - Route heading information was added.

Section 11: Germ Cell Mutagenicity table - Value heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Name heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Route heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Target Organ(s) heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Value heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Species heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Test Result heading information was added.

Section 11: Specific Target Organ Toxicity - repeated exposure table - Exposure Duration heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Name heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Route heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Target Organ(s) heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Value heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Species heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Test Result heading information was added.

Section 11: Specific Target Organ Toxicity - single exposure table - Exposure Duration heading information was added.

Section 11: Reproductive and/or Developmental Effects table - Name heading information was added.

Section 11: Reproductive and/or Developmental Effects table - Route heading information was added.

Section 11: Reproductive and/or Developmental Effects table - Value heading information was added.

Section 11: Reproductive and/or Developmental Effects table - Species heading information was added.

Section 11: Reproductive and/or Developmental Effects table - Test Result heading information was added.

Section 11: Reproductive and/or Developmental Effects text information was added.

Section 11: Carcinogenicity text information was added.

Section 8: glove data - Material heading information was added.

Section 8: glove data - Thickness heading information was added.

Section 8: glove data - Breakthrough Time heading information was added.

Section 8: glove data value information was added.

Section 8: Eve/face protection information information was deleted.

Section 8: Skin protection - recommended gloves information information was deleted.

Section 2: Special provisions concerning the labelling of certain substances heading information was deleted.

Section 2: EU sensitizer phrase information was deleted.

Label: CLP Percent Unknown information was deleted.

Label: CLP Percent Unknown information was deleted.

Label: CLP Supplemental Hazard Statements - Header information was deleted.

Label: CLP Supplemental Information - Header information was deleted.

Contains statement for sensitizers information was deleted.

Contains statement for sensitizers information was deleted.

Contains statement for sensitizers information was deleted.

Section 11: Carcinogenicity Table information was deleted.

Section 11: Exposure Duration table heading information was deleted.

Section 11: Skin Sensitization Table information was deleted.

Section 11: Test Result table heading information was deleted.

Section 8: Personal Protection - Eye information information was deleted.

List of sensitizers information was deleted.

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